

[illegible]

Fig. 1B

M. abscessus	aacgggaaaggcccttcgggggtactcgagtggcgaacgggtgagtaaacacgtgggtgatc	111
M. avium	aacgggaaaggcccttcgggaggtactcgagtggcgaacgggtgagtaaacacgtgggcaat	
M. bovis	aacgggaaagggtctcttcggagataactcgagtggcgaacgggtgagtaaacacgtgggtgat	
M. chelonae	aacgggaaaggcccttcgggggtactcgagtggcgaacgggtgagtaaacacgtgggtgatc	
M. farcinogen	aacgggaaaggcccttcgggggtactcgagtggcgaacgggtgagtaaacacgtgggtgatct	
M. fortuitum	aacgggaaaggcccttcgggtactcgagtggcgaacgggtgagtaaacacgtgggtgatctg	
M. gordonae	aacggtaaggcccttcgggntacacgagtggcgaacgggtgagtaaacacgtgggtaatct	
M. heckeshornense	aacgggaaaggcccgcttcgggtgggtgctcgagtggcgaacgggtgagtaaacacgtgggtg	
M. intercellulare	aacgggaaagnccccttcgggggtactcgagtggcgaacgggtgagtaaacacgtgggcaatc	
M. kansaii	aacgggaaagggtctcttcggagacactcgagtggcgaacgggtgagtaaacacgtgggcaat	
M. kubicae	aacgggaaaggccccttcgggggtactcgagtggcgaacgggtgagtaaacacgtgggtgat	
M. lentoflavum	aacgggaaaggcctcttcgggaggtactcgagtggcgaacgggtgagtaaacacgtgggtaat	
M. mucogenicum	aacgggaaaggcccttcgggggtactcgagtggcgaacgggtgagtaaacacgtgggtgatct	
M. parafinum	aacgggaaaggccccttcgggggtactcgagtggcgaacgggtgagtaaacacgtnggcaat	
M. simiae	aacgggaaaggccccttcgggggtactcgagtggcgaacgggtgagtaaacacgtgggtaat	
M. szulgai	aacgggaaagnccccttcgggntactcgagtggcgaacgggtgagtaaacacgtgggtaatc	
M. tuberculosis	aacgggaaagggtctcttcggagataactcgagtggcgaacgggtgagtaaacacgtgggtgat	



FIG. 1A

M. abscessus	----- <u>acatgcaagtcg</u>	51
M. avium	----- <u>gacgaacgctggcggcgtgcttaacacatgcaagtcg</u>	
M. bovis	----- <u>gcggcgtgcttaacacatgcaagtcg</u>	
M. chelonae	----- <u>gacgaacgctggcggcgtgcttaacacatgcaagtcg</u>	
M. farcinogen	----- <u>cgaacgctgcggcgtgcttaacacatgcaagtcg</u>	
M. fortuitum	----- <u>ggcggcgtgcttaacacatgcaagtcg</u>	
M. gordonae	----- <u>ggcggcgtgcttaacacatgcaagtcg</u>	
M. heckeshornense	----- <u>tgatcctggctcaggacgaacgctggcggcgtgcttaacacatgcaagtcg</u>	
M. intercellulare	----- <u>ttaacacatgcaagtng</u>	
M. kansasii	----- <u>gcggcgtgcttaacacatgcaagtcg</u>	
M. kubicae	----- <u>gtgcttaacacatgcaagtcg</u>	
M. lentiflavum	----- <u>ggcggcgtgcttaacacatgcaagtcg</u>	
M. mucogenicum	----- <u>gacgaacgctggcggcgtgcttaacacatgcaagtcg</u>	
M. parafinum	----- <u>cgtgcttaacacatgcaagtcg</u>	
M. simiae	----- <u>ggcggcgtgcttaacacatgcaagtcg</u>	
M. szulgai	----- <u>ggcggcgtgcttaacacatgcaagtcg</u>	
M. tuberculosis	----- <u>ggcggcgtgcttaacacatgcaagtcg</u>	

Fig. 1C

M. abscessus	tgccctgcactctgggataagcctgggaaactgggtctaataccggataggaccacacac	171
M. avium	ctgccctgcacttcgggataagcctgggaaactgggtctaataccggataggacctcaag	
M. bovis	ctgccctgcacttcgggataagcctgggaaactgggtctaataccggataggaccacggg	
M. chelonae	tgccctgcactctgggataagcctgggaaactgggtctaataccggataggaccacacac	
M. farcinogen	gccctgcactttgggataagcctgggaaactgggtctaataccggataggaccacgcgct	
M. fortuitum	ccctgcactttgggataagcctgggaaactgggtctaataccgaatatgaccgcgcactt	
M. gordonae	gccctgcacatcgggataagcctgggaaactgggtctaataccgaataggaccacaggac	
M. heckeshornense	acctgccctgcacttcgggataagcctgggaaactgggtctaataccggataggaccgcg	
M. intercellulare	tgccctgcacttcgggataagcctgggaaactgggtctaataccggataggacctttagg	
M. kansaii	ctgccctgcacaccgggataagcctgggaaactgggtctaataccggataggaccacttg	
M. kubicae	ctaccctgcacttcgggataagcctgggaaactgggtctaataccggataggaccatgag	
M. lentoflavum	ctgccctgcacttcgggataagcctgggaaactgggtctaataccggataggaccttttg	
M. mucogenicum	gccctgcactttgggataagcctgggaaactgggtctaataccgaataggaccacgcgct	
M. parafinum	ctgccctgcacttcgggataagcctgggaaactgggtctaataccggataggaccacttg	
M. simiae	ctgccctgcacttcgggataagcctgggaaactgggtctaataccggataggaccacttg	
M. szulgai	tgccctgcacttcgggataagcctgggaaactgggtctaataccggataggaccccgagg	
M. tuberculosis	ctgccctgcacttcgggataagcctgggaaactgggtctaataccggataggaccacggg	

Fig. 1D

M. abscessus	ttcatggtgagtgggtgcaaagcttttgcggtgtgggatgagcccgcggcctatcagcttg	231
M. avium	acgcatgtcttctggtggaaagcttttgcggtgtgggatgggcccgcggcctatcagctt	
M. bovis	atgcatgtcttgtggtngaaagcgcttttagcggtgtgggatgagcccgcggcctatcagc	
M. chelonae	ttcatggtgagtgggtgcaaagcttttgcggtgtgggatgagcccgcggcctatcagcttg	
M. farcinogen	tcatggtgtgtggtggaaagcttttgcggtgtgggatgggcccgcggcctatcagcttgt	
M. fortuitum	cctggtgtgtggtggaaagcttttgcggtgtgggatgggcccgcggcctatcagcttgtt	
M. gordonae	acatgtcctgtggtggaaagcttttgcggtgtgggatgggcccgcggcctatcagcttgt	
M. heckeshornense	ccatgcatgtggtgtggtggaaagcggtgtggtagtgtggtgtgggatgggcccgcggcctat	
M. intercellulare	cgcattgtctttaggtggaaagcttttgcggtgtgggatgggcccgcggcctatcagcttg	
M. kansaii	gcgcatgccttgtggtggaaagcttttgcggtgtgggatgggcccgcggcctatcagctt	
M. kubicae	atgcatgtcttatggtggaaagcttttgcggtgtgggatgggcccgcggcctatcagctt	
M. lentoflavum	gcgcatgccttttgggtggaaagcttttgcggtgtgggatgggcccgcggcctatcagctt	
M. mucogenicum	tcatggtgtgtggtggaaagcttttgcggtgtgggatgggcccgcggcctatcagcttgt	
M. parafinum	gcgcatgccttgtggtggaaagcttttgcggtgtgggatgggcccgcggcctatcagctt	
M. simiae	gcgcatgccttgtggtggaaagcttttgcggtgtgggatgggcccgcggcctatcagctt	
M. szulgai	cgcattgccttgggtggaaagcttttgcggtgtgggatgggcccgcggcctatcagcttg	
M. tuberculosis	atgcatgtcttctggtggaaagcgcttttagcggtgtgggatgagcccgcggcctatcagc	

Fig. 1E

M. abscessus	Ttggtggggtaatggccacccaaggcgacgacgggtagccggcctgagaggggtgaccggc	291
M. avium	gttggtggggtgacggcctaccaaggcgacgacgggtagccggcctgagaggggtgtccgg	
M. bovis	ttggttggtggggtnacggcctaccaaggcgacgacgggtagccggcctgagaggggtgtcc	
M. chelonae	ttggtggggtaatggccacccaaggcgacgacgggtagccggcctgagaggggtgaccggc	
M. farcinogen	tggtggggtaatggcctaccaaggcgacgacgggtagccggcctgagaggggtgaccggcc	
M. fortuitum	ggtggggtaatggcctaccaaggcgacgacgggtagccggcctgagaggggtgaccggcca	
M. gordonae	tggtggggtgatggcctaccaaggcgacgacgggtagccggcctgagaggggtgtccggcc	
M. heckeshornense	cagcttggttggtggggtgatggcctaccaaggcgacgacgggtagccggcctgagaggggt	
M. intercellulare	ttggtggggtgatggcctaccaaggcgacgacgggtagccggcctgagaggggtgtccggc	
M. kansaii	gttggtggggtgacggcctaccaaggcgacgacgggtagccggcctgagaggggtgtccgg	
M. kubicae	gttggtggggtgacggcctaccaaggcgacgacgggtagccggcctgagaggggtgtccgg	
M. lentoflavum	gttggtggggtgacggcctaccaaggcgacgacgggtagccggcctgagaggggtgtccgg	
M. mucogenicum	tggtggggtaatggcctaccaaggcgacgacgggtagccggcctgagaggggtgaccggcc	
M. parafinum	gttggtggggtgatggcctaccaaggcgacgacgggtagccggcctgagaggggtgtccgg	
M. simiae	gttggtggggtgacggcctaccaaggcgacgacgggtagccggcctgagaggggtgtccgg	
M. szulgai	ttggtggggtgacggcctaccaaggcgacgacgggtagccggcctgagaggggtgtccggc	
M. tuberculosis	ttggttggtggggtgacggcctaccaaggcgacgacgggtagccggcctgagaggggtgtcc	

Fig. 1F

Fig. 1H

M. abscessus	acctctttcagtagggacgaagcgaaagtgacggtagctacagaagaaggaccggccaac	471
M. avium	aacctctttcaccatcgacgaaggtccgggttttctcggattgacggtaggtggagaaga	
M. bovis	taaacctctttcaccatcgacgaaggtccgggttctctcggattgacggtaggtggagaa	
M. chelonae	acctctttcagtagggacgaagcgaaagtgacggtagctacagaagaaggaccggccaac	
M. farcinogen	cctctttcaatagggacgaagcgcaagtgacggtagctatagaagaaggaccggccaact	
M. fortuitum	ctctttcaatagggacgaagcgcaagtgacggtagctatagaagaaggaccggccaacta	
M. gordonae	cctctttcaccatcgacgaaggtccgggttttctcgggtgacggtaggtggagaagaag	
M. heckeshornense	gttgtaaacctctttcaccatcgacgaagccgcagctttgttggtgacggtaggtgg	
M. intercellulare	acctctttcaccatcgacgaaggtccgggttttctcggattgacggtaggtggagaaga	
M. kansaii	aacctctttcaccatcgacgaaggtccgggttctctcggattgacggtaggtggagaaga	
M. kubicae	aacctctttcagcagggacgaagcgcaagtgacggtagctgcagaagaagcaccggccaa	
M. lentoflavum	aacctctttcagcagggacgaagcgcaagtgacggtagctgcagaagaagcaccggccaa	
M. mucogenicum	cctctttcaatagggacgaagcgcaagtgacggtagctatagaagaagcaccggccaact	
M. parafinum	aacctctttcaccatcgacgaaggtcacttcgtgagttgacggtaggtggagaagaagc	
M. simiae	aacctctttcagcagggacgaagcgcaagtgacggtagctgcagaagaagcaccggccaa	
M. szulgai	acctctttcaccatcgacgaaggtccgggttttctcggattgacggtaggtggagaaga	
M. tuberculosis	taaacctctttcaccatcgacgaaggtccgggttctctcggattgacggtaggtggagaa	



Fig. 1I

M. abscessus	tacgtgccagcagccgcggttaatacgtaggggtccgagcggttgccggaattactggg	531
M. avium	agcaccggccaactacgtgccagcagccgcggttaatacgtaggggtgcgagcggttgccg	
M. bovis	gaagcaccggccaactacgtgccagcagccgcggttaatacgtaggggtgcgagcggttgcc	
M. chelonae	tacgtgccagcagccgcggttaatacgtaggggtccgagcggttgccggaattactggg	
M. farcinogen	acgtgccagcagccgcggttaatacgtaggggtccgagcggttgccggaattactggg	
M. fortuitum	cgtgccagcagccgcggttaatacgtaggggtccgagcggttgccggaattactggg	
M. gordonae	caccggccaactacgtgccagcagccgcgntaatacgtaggggtgcgagcggttgccgga	
M. heckeshornense	agaagaagcaccggccaactacgtgccagcagccgcggttaatacgtaggggtgcaagcg	
M. intercellulare	gcaccggccaactacgtgccagcagccgcggttaatacgtaggggtgcgagcggttgccgga	
M. kansaii	agcaccggccaactacgtgccagcagccgcgntaatacgtaggggtgcgagcggttgccg	
M. kubicae	ctacgtgccagcagccgcggttaatacgtaggggtgcgagcggttgccggaattactggg	
M. lentoflavum	ctacgtgccagcagccgcggttaatacgtaggggtgcgagcggttgccggaattactggg	
M. mucogenicum	acgtgccagcagccgcggttaatacgtaggggtgcgagcggttgccggaattactggg	
M. parafinum	accggccaactacgtgccagcagccgcggttaatacgtaggggtgcgagcggttgccgga	
M. simiae	ctacgtgccagcagccgcggttaatacgtaggggtgcgagcggttgccnggaattactggg	
M. szulgai	gcaccggccaactacgtgccagcagccgcggttaatacgtaggggtgcgagcggttgccgga	
M. tuberculosis	gaagcaccggccaactacgtgccagcagccgcggttaatacgtaggggtgcgagcggttgcc	

Fig. 1J

M. abscessus	aaagagctcgtaggtggtttgtcgcggttggttcgtgaaaactcacagcttaactgtgggcg	591
M. avium	aattactgggcgtaaagagctcgtaggtggtttgtcgcggttggttcgtgaaatctcacggc	
M. bovis	ggaattactgggcgtaaagagctcgtaggtggtttgtcgcggttggttcgtgaaatctcacg	
M. chelonae	aaagagctcgtaggtggtttgtcgcggttggttcgtgaaaactcacagcttaactgtgggcg	
M. farcinogen	aagagctcgtaggtggtttgtcgcggttggttcgtgaaaactcacagcttaactgtgggcg	
M. fortuitum	agagctcgtaggtggtttgtcgcggttggttcgtgaaaactcacagcttaactgtgggcg	
M. gordonae	ttactgggcgtaaagagctcgtaggtggtttgtcgcggttggttcgtgaaatctcacggctt	
M. heckeshornense	gtccggaattactgggcgtaaagagctcgtaggcggcgttggttcgtgaaatctcacggctt	
M. intercellulare	attactgggcgtaaagagctcgtaggtggtttgtcgcggttggttcgtgaaatctcacggct	
M. kansaii	aattactgggcgtaaagagctcgtaggtggtttgtcgcggttggttcgtgaaatctcacggc	
M. kubicae	taaagagctcgtaggtggtttgtcgcggttggttcgtgaaaaccgggggcttaaccctcggc	
M. lentoflavum	taaagagctcgtaggtggtttgtcgcggttggttcgtgaaaaccgggggcttaaccctcggc	
M. mucogenicum	aagagctcgtaggtggtttgtcgcggttggttcgtgaaaactcacagcttaactgtgggcg	
M. parafinum	tactgggcgtaaagagctcgtaggtggtttgtcgcggttggttcgtgaaatctcacggctta	
M. simiae	taaagagctcgtaggtggtttgtcgcggttggttcgtgaaaaccgggggcttaaccctcggc	
M. szulgai	attactgggcgtaaagagctcgtaggtggtttgtcgcggttggttcgtgaaatctcacggct	
M. tuberculosis	ggaattactgggcgtaaagagctcgtaggtggtttgtcgcggttggttcgtgaaatctcacg	

Fig. 1K

[illegible]

711

M. abscessus	tggaa <u>tgcg</u> cagatatcaggaggaacaccggtggcgaaggcggtctctgggcagtaact	711
M. avium	cctggtgtagcgggtggaatg <u>cg</u> cagatatcaggaggaacaccggtggcgaaggcggtct	
M. bovis	ttcctggtgtagcgggtggaatg <u>cg</u> cagatatcaggaggaacaccggtgncgaaggcggt	
M. chelonae	tggaa <u>tgcg</u> cagatatcaggaggaacaccggtggcgaaggcggtctctgggcagtaact	
M. farcinogen	ggaatg <u>cg</u> cagatatcaggaggaacaccggtggcgaaggcggtctctgggcagtaactg	
M. fortuitum	gaatg <u>cg</u> cagatatcaggaggaacaccggtggcgaaggcggtctctgggcagtaactga	
M. gordonae	tggtgtagcgggtggaatg <u>cg</u> cagatatcaggaggaacaccggtggcgaaggcggtctct	
M. heckeshornense	ggaattcctggtgtagcgggtggaatg <u>cg</u> cagatatcaggaggaacaccggtggcgaaggc	
M. intercellulare	ctggtgtagcgggtggaatg <u>cg</u> cagatatcaggaggaacaccggtggcgaaggcggtctc	
M. kansaii	cctggtgtagcgggtggaatg <u>cg</u> cagatatcaggaggaacaccggtggcgaaggcggtct	
M. kubicae	gtggaatg <u>cg</u> cagatatcaggaggaacaccggtggcgaaggcggtctctgggcagtaac	
M. lentoflavum	gtggaatg <u>cg</u> cagatatcaggaggaacaccggtggcgaaggcggtctctgggcagtaac	
M. mucogenicum	ggaatg <u>cg</u> cagatatcaggaggaacaccggtggcgaaggcggtctctgggcagtaactg	
M. parafinum	ggtgtagcgggtggaatg <u>cg</u> cagatatcaggaggaacaccggtggcgaaggcggtctctg	
M. simiae	gtggaatg <u>cg</u> cagatatcaggaggaacaccggtggcgaaggcggtctctgggcagtaac	
M. szulgai	ctggtgtagcngtggaatg <u>cg</u> cagatatcaggaggaacaccggtggcgaaggcggtctc	
M. tuberculosis	ttcctggtgtagcgggtggaatg <u>cg</u> cagatatcaggaggaacaccggtggcgaaggcggt	

M. abscessus

M. tuberculosis

Fig. 2A

M. abscessus	----- <u>acatgcaagtcg</u>	51
M. avium	-----gacgaacgctggcggcgtgcttaacacatgcaagtcg	
M. bovis	-----gcgggcgtgcttaacacatgcaagtcg	
M. chelonae	-----gacgaacgctggcggcgtgcttaacacatgcaagtcg	
M. farcinogen	-----cgaacgctcgcggcgtgcttaacacatgcaagtcg	
M. fortuitum	-----ggcggcgtgcttaacacatgcaagtcg	
M. gordonae	-----ggcggcgtgcttaacacatgcaagtcg	
M. heckeshornense	-----tgatcctggctcaggacgaacgctggcggcgtgcttaacacatgcaagtcg	
M. intercellulare	----- <u>ttaacacatgcaagtng</u>	
M. kansasii	-----gcgggcgtgcttaacacatgcaagtcg	
M. kubicae	-----gtgcttaacacatgcaagtcg	
M. lentiflavum	-----ggcggcgtgcttaacacatgcaagtcg	
M. mucogenicum	-----gacgaacgctggcggcgtgcttaacacatgcaagtcg	
M. parafinum	-----cgtgcttaacacatgcaagtcg	
M. simiae	-----ggcggcgtgcttaacacatgcaagtcg	
M. szulgai	-----ggcggcgtgcttaacacatgcaagtcg	
M. tuberculosis	-----ggcggcgtgcttaacacatgcaagtcg	

Fig. 2B

M. abscessus	aacgggaaaggcc-cttcgg-ggtact-cgagtggcgaacgggtgagtaacacgtgggtgat	111
M. avium	aacggaaaggcct-cttcggaggtact-cgagtggcgaacgggtgagtaacacgtgggcaat	
M. bovis	aacggaaaggctct-cttcggagatact-cgagtggcgaacgggtgagtaacacgtgggtgat	
M. chelonae	aacgggaaaggcc-cttcgg-ggtact-cgagtggcgaacgggtgagtaacacgtgggtgat	
M. farcinogen	aacggaaaggcc--cttcggg-gtact-cgagtggcgaacgggtgagtaacacgtgggtgat	
M. fortuitum	aacggaaaggcc--cttcggg--tact-cgagtggcgaacgggtgagtaacacgtgggtgat	
M. gordonae	aacggtaaggcc--cttcgggn-taca-cgagtggcgaacgggtgagtaacacgtgggtaat	
M. heckeshornense	aacggaaaggcccgcttcgggtgggtgctcgagtggcgaacgggtgagtaacacgtgggtgac	
M. intercellulare	aacggaaagnccc-cttcgg--gggtactcgagtggcgaacgggtgagtaacacgtgggcaat	
M. kansaii	aacggaaaggctct-cttcggagac-actcgagtggcgaacgggtgagtaacacgtgggcaat	
M. kubicae	aacggaaaggccc-cttcgggggt-actcgagtggcgaacgggtgagtaacacgtgggtgat	
M. lentoflavum	aacggaaaggcct-cttcggaggt-actcgagtggcgaacgggtgagtaacacgtgggtaat	
M. mucogenicum	aacggaaaggcc--cttcgg-ggt-actcgagtggcgaacgggtgagtaacacgtgggtgat	
M. parafinum	aacggaaaggccc-cttcgggggt-actcgagtggcgaacgggtgagtaacacgtngcaat	
M. simiae	aacggaaaggccc-cttcgggggt-actcgagtggcgaacgggtgagtaacacgtgggtaat	
M. szulgai	aacggaaagnccc-cttcgggn-t-actcgagtggcgaacgggtgagtaacacgtgggtaat	
M. tuberculosis	aacggaaaggctct-cttcggagat-actcgagtggcgaacgggtgagtaacacgtgggtgat	

Fig. 2C

M. abscessus	ctgccctgcactctgggataagcctgggaaactgggtctaataccggataggaccacaca	171
M. avium	ctgccctgcacttcgggataagcctgggaaactgggtctaataccggataggacctcaag	
M. bovis	ctgccctgcacttcgggataagcctgggaaactgggtctaataccggataggaccacggg	
M. chelonae	ctgccctgcactctgggataagcctgggaaactgggtctaataccggataggaccacaca	
M. farcinogen	ctgccctgcactttgggataagcctgggaaactgggtctaataccggataggaccacgcg	
M. fortuitum	ctgccctgcactttgggataagcctgggaaactgggtctaataccgaatatgaccgcgca	
M. gordonae	ctgccctgcacatcgggataagcctgggaaactgggtctaataccgaataggaccacagg	
M. heckeshornense	ctgccctgcacttcgggataagcctgggaaactgggtctaataccggataggaccgcgcc	
M. intercellulare	ctgccctgcacttcgggataagcctgggaaactgggtctaataccggataggacctttag	
M. kansaii	ctgccctgcacaccgggataagcctgggaaactgggtctaataccggataggaccacttg	
M. kubicae	ctaccctgcacttcgggataagcctgggaaactgggtctaataccggataggaccatgag	
M. lentoflavum	ctgccctgcacttcgggataagcctgggaaactgggtctaataccggataggaccttttg	
M. mucogenicum	ctgccctgcactttgggataagcctgggaaactgggtctaataccgaataggaccacgcg	
M. parafinum	ctgccctgcacttcgggataagcctgggaaactgggtctaataccggataggaccacttg	
M. simiae	ctgccctgcacttcgggataagcctgggaaactgggtctaataccggataggaccacttg	
M. szulgai	ctgccctgcacttcgggataagcctgggaaactgggtctaataccggataggaccccgag	
M. tuberculosis	ctgccctgcacttcgggataagcctgggaaactgggtctaataccggataggaccacggg	



Fig. 2D

M. abscessus	cttcatggtgagtgggtgcaaagc-tttt---gcggtgtgggatgagcccgcggcctatca	231
M. avium	acgcatgtcttctggtggaaagc-tttt---gcggtgtgggatgggcccgcggcctatca	
M. bovis	atgcatgtcttctggtngaaagcgctt--agcgggtgtgggatgagcccgcggcctatca	
M. chelonae	cttcatggtgagtgggtgcaaagc-tttt---gcggtgtgggatgagcccgcggcctatca	
M. farcinogen	cttcatggtgtgtggtggaaagc-tttt---gcggtgtgggatgggcccgcggcctatca	
M. fortuitum	cttctggtgtgtggtggaaagc-tttt---gcggtgtgggatgggcccgcggcctatca	
M. gordonae	acacatgtcctgtggtggaaagc-tttt---gcggtgtgggatgggcccgcggcctatca	
M. heckeshornense	atgcatgtggtgtggtggaaagcggtgtggtagtgggtgtgggatgggcccgcggcctatca	
M. intercellulare	gcgcatgtctttaggtggaaagc-tttt---gcggtgtgggatgggcccgcggcctatca	
M. kansaii	gcgcatgccttgtggtggaaagc-tttt---gcggtgtgggatgggcccgcggcctatca	
M. kubicae	atgcatgtcttatggtggaaagc-tttt---gcggtgtgggatgggcccgcggcctatca	
M. lentoflavum	gcgcatgccttttgggtggaaagc-tttt---gcggtgtgggatgggcccgcggcctatca	
M. mucogenicum	cttcatggtgtgtggtggaaagc-tttt---gcggtgtgggatgggcccgcggcctatca	
M. parafinum	gcgcatgccttgtggtggaaagc-tttt---gcggtgtgggatgggcccgcggcctatca	
M. simiae	gcgcatgccttgtggtggaaagc-tttt---gcggtgtgggatgggcccgcggcctatca	
M. szulgai	gcgcatgccttgggtggaaagc-tttt---gcggtgtgggatgggcccgcggcctatca	
M. tuberculosis	atgcatgtcttctggtggaaagcgctt--agcgggtgtgggatgagcccgcggcctatca	

Fig. 2E

M. abscessus	gcttggttggtggggtaatggccacccaaggcgacgacgggtagccggcctgagaggggtga	291
M. avium	gcttggttggtggggtgacggcctaccaaggcgacgacgggtagccggcctgagaggggtgt	
M. bovis	gcttggttggtggggtnacggcctaccaaggcgacgacgggtagccggcctgagaggggtgt	
M. chelonae	gcttggttggtggggtaatggccacccaaggcgacgacgggtagccggcctgagaggggtga	
M. farcinogen	gcttggttggtggggtaatggcctaccaaggcgacgacgggtagccggcctgagaggggtga	
M. fortuitum	gcttggttggtggggtaatggcctaccaaggcgacgacgggtagccggcctgagaggggtga	
M. gordonae	gcttggttggtggggtgatggcctaccaaggcgacgacgggtagccggcctgagaggggtgt	
M. heckeshornense	gcttggttggtggggtgatggcctaccaaggcgacgacgggtagccggcctgagaggggtgt	
M. intercellulare	gcttggttggtggggtgatggcctaccaaggcgacgacgggtagccggcctgagaggggtgt	
M. kansaii	gcttggttggtggggtgacggcctaccaaggcgacgacgggtagccggcctgagaggggtgt	
M. kubicae	gcttggttggtggggtgacggcctaccaaggcgacgacgggtagccggcctgagaggggtgt	
M. lentoflavum	gcttggttggtggggtgacggcctaccaaggcgacgacgggtagccggcctgagaggggtgt	
M. mucogenicum	gcttggttggtggggtaatggcctaccaaggcgacgacgggtagccggcctgagaggggtga	
M. parafinum	gcttggttggtggggtgatggcctaccaaggcgacgacgggtagccggcctgagaggggtgt	
M. simiae	gcttggttggtggggtgacggcctaccaaggcgacgacgggtagccggcctgagaggggtgt	
M. szulgai	gcttggttggtggggtgacggcctaccaaggcgacgacgggtagccggcctgagaggggtgt	
M. tuberculosis	gcttggttggtggggtgacggcctaccaaggcgacgacgggtagccggcctgaga-ggtgt	

Fig. 2F

<i>M. abscessus</i>	ccggccacactgggactgagatacggcccagactcctacgggaggcagcagtggggaata	351
<i>M. avium</i>	ccggccacactgggactgagatacggcccagactcctacgggaggcagcagtggggaata	
<i>M. bovis</i>	ccggccacactgggactgagatacggcccagactcctacgggaggcagcagtggggaata	
<i>M. chelonae</i>	ccggccacactgggactgagatacggcccagactcctacgggaggcagcagtggggaata	
<i>M. farcinogen</i>	ccggccacactgggactgagatacggcccagactcctacgggaggcagcagtggggaata	
<i>M. fortuitum</i>	ccggccacactgggactgagatacggcccagactcctacgggaggcagcagtggggaata	
<i>M. gordonae</i>	ccggccacactgggactgagatacggcccagactnctacgggaggcagcagtggggaata	
<i>M. heckeshornense</i>	ccggccacactgggactgagatacggcccagactcctacgggaggcagcagtggggaata	
<i>M. intercellulare</i>	ccggccacactgggactgagatacggcccagactnctacgggaggcagcagtggggaata	
<i>M. kansaii</i>	ccggccacactgggactgagatacggcccagactcctacgggaggcagcagtggggaata	
<i>M. kubicae</i>	ccggccacactgggactgagatacggcccagactcctacgggaggcagcagtggggaata	
<i>M. lentoflavum</i>	ccggccacactgggactgagatacggcccagactcctacgggaggcagcagtggggaata	
<i>M. mucogenicum</i>	ccggccacactgggactgagatacggcccagactcctacgggaggcagcagtggggaata	
<i>M. parafinum</i>	ccggccacactgggactgagatacggcccagactcctacgggaggcagcagtggggaata	
<i>M. simiae</i>	ccggccacactgggactgagatacggcccagactnctacgggaggcagcagtggggaata	
<i>M. szulgai</i>	ccggccacactgggactgagatacggcccagactontacgggaggcagcagtggggaata	
<i>M. tuberculosis</i>	ccggccacactgggactgagatacggcccagactcctacgggaggcagcagtggggaata	

Fig. 2G

<i>M. abscessus</i>	ttgcacaatgggcgcaagcctgatgcagcgacgccgctgagggatgacggccttcgggt	411
<i>M. avium</i>	ttgcacaatgggcgcaagcctgatgcagcgacgccgctgggggatgacggccttcgggt	
<i>M. bovis</i>	ttgcacaatgggcgcaagcctgatgcagcgacgccgctgggggatgacggcctt-ggggt	
<i>M. chelonae</i>	ttgcacaatgggcgcaagcctgatgcagcgacgccgctgagggatgacggccttcgggt	
<i>M. farcinogen</i>	ttgcacaatgggcgcaagcctgatgcagcgacgccgctgagggatgacggccttcgggt	
<i>M. fortuitum</i>	ttgcacaatgggcgcaagcctgatgcagcgacgccgctgagggatgacggccttcgggt	
<i>M. gordonae</i>	ttgcacaatgggcgaaagcctgatgcagcgacgccgctgggggatgacggccttcgggt	
<i>M. heckeshornense</i>	ttgcacaatgggcgcaagcctgatgcagcgacgccgctgggggatgacggccttcgggt	
<i>M. intercellulare</i>	ttgcacaatgggcgcaagcctgatgcagcgacgccgctgggggatgacggccttcgggt	
<i>M. kansaii</i>	ttgcacaatgggcgcaagcctgatgcagcgacgccgctgggggatgacggccttcgggt	
<i>M. kubicae</i>	ttgcacaatgggcgcaagcctgatgcagcgacgccgctgggggatgacggccttcgggt	
<i>M. lentoflavum</i>	ttgcacaatgggcgcaagcctgatgcagcgacgccgctgggggatgacggccttcgggt	
<i>M. mucogenicum</i>	ttgcacaatgggcgcaagcctgatgcagcgacgccgctgagggatgacggccttcgggt	
<i>M. parafinum</i>	ttgcacaatgggcgcaagcctgatgcagcgacgccgctgggggatgacggccttcgggt	
<i>M. simiae</i>	ttgcacaatgggcgcaagcctgatgcagcgacgccgctgggggatgacggccttcgggt	
<i>M. szulgai</i>	ttgcacaatgggcgcaagcctgatgcagcgacgccgctgggggatgacggccttcgggt	
<i>M. tuberculosis</i>	ttgcacaatgggcgcaagcctgatgcagcgacgccgctgggggatgacggccttcgggt	

Fig. 2H

M. abscessus	tgtaaacctctttcagtagggacgaagcgaaagtgacggtacctacagaagaaggaccgg	471
M. avium	tgtaaacctctttcaccatcgacgaaggtccgggttttctcggattgacggtaggtggag	
M. bovis	tgtaaacctctttcaccatcgacgaaggtccgggttctctcggattgacggtaggtggag	
M. chelonae	tgtaaacctctttcagtagggacgaagcgaaagtgacggtacctacagaagaaggaccgg	
M. farcinogen	tgtaaacctctttcaatagggacgaagcgcaagtgacggtacctatagaagaaggaccgg	
M. fortuitum	tgtaaacctctttcaatagggacgaagcgcaagtgacggtacctatagaagaaggaccgg	
M. gordonae	tgtaaacctctttcaccatcgacgaaggtccgggttttctcgggctgacggtaggtggag	
M. heckeshornense	tgtaaacctctttcaccatcgacgaagcgcagcttttgttggtgacggtaggtggag	
M. intercellulare	tgtaaacctctttcaccatcgacgaaggtccgggttttctcggattgacggtaggtggag	
M. kansaii	tgtaaacctctttcaccatcgacgaaggtccgggttctctcggattgacggtaggtggag	
M. kubicae	tgtaaacctctttcagcagggacgaagcgcaagtgacggtacctgcagaagaagcaccgg	
M. lentoflavum	tgtaaacctctttcagcagggacgaagcgcaagtgacggtacctgcagaagaagcaccgg	
M. mucogenicum	tgtaaacctctttcaatagggacgaagcgcaagtgacggtacctatagaagaagcaccgg	
M. parafinum	tgtaaacctctttcaccatcgacgaaggtcacttcgtgagttgacggtaggtggagaag	
M. simiae	tgtaaacctctttcagcagggacgaagcgcaagtgacggtacctgcagaagaagcaccgg	
M. szulgai	tgtaaacctctttcaccatcgacgaaggtccgggttttctcggattgacggtaggtggag	
M. tuberculosis	tgtaaacctctttcaccatcgacgaaggtccgggttctctcggattgacggtaggtggag	

Fig. 2I

M. abscessus	-----ccaactacgtgccagcagccgcggttaatacgtaggggtccgagcgttgt	531
M. avium	aag---caccggccaactacgtgccagcagccgcggttaatacgtaggggtgcgagcgttgt	
M. bovis	aagaagcaccggccaactacgtgccagcagccgcggttaatacgtaggggtgcgagcgttgt	
M. chelonae	-----ccaactacgtgccagcagccgcggttaatacgtaggggtccgagcgttgt	
M. farcinogen	-----ccaactacgtgccagcagccgcggttaatacgtaggggtccgagcgttgt	
M. fortuitum	-----ccaactacgtgccagcagccgcggttaatacgtaggggtccgagcgttgt	
M. gordonae	aagaagcaccggccaactacgtgccagcagccgcgntaatacgtaggggtgcgagcgttgt	
M. heckeshornense	aagaagcaccggccaactacgtgccagcagccgcggttaatacgtaggggtgcaagcgttgt	
M. intercellulare	aagaagcaccggccaactacgtgccagcagccgcggttaatacgtaggggtgcgagcgttgt	
M. kansaii	aagaagcaccggccaactacgtgccagcagccgcgntaatacgtaggggtgcgagcgttgt	
M. kubicae	-----ccaactacgtgccagcagccgcggttaatacgtaggggtgcgagcgttgt	
M. lentoflavum	-----ccaactacgtgccagcagccgcggttaatacgtaggggtgcgagcgttgt	
M. mucogenicum	-----ccaactacgtgccagcagccgcggttaatacgtaggggtgcgagcgttgt	
M. parafinum	aag---caccggccaactacgtgccagcagccgcggttaatacgtaggggtgcgagcgttgt	
M. simiae	-----ccaactacgtgccagcagccgcggttaatacgtaggggtgcgagcgttgt	
M. szulgai	aagaagcaccggccaactacgtgccagcagccgcggttaatacgtaggggtgcgagcgttgt	
M. tuberculosis	aagaagcaccggccaactacgtgccagcagccgcggttaatacgtaggggtgcgagcgttgt	

Fig. 2J

<i>M. abscessus</i>	ccggaattactgggcgtaaagagctcgtaggtgggttgcgcgttggtcgtgaaaactca	591
<i>M. avium</i>	ccggaattactgggcgtaaagagctcgtaggtgggttgcgcgttggtcgtgaaatctca	
<i>M. bovis</i>	ccggaattactgggcgtaaagagctcgtaggtgggttgcgcgttggtcgtgaaatctca	
<i>M. chelonae</i>	ccggaattactgggcgtaaagagctcgtaggtgggttgcgcgttggtcgtgaaaactca	
<i>M. farcinogen</i>	ccggaattactgggcgtaaagagctcgtaggtgggttgcgcgttggtcgtgaaaactca	
<i>M. fortuitum</i>	ccggaattactgggcgtaaagagctcgtaggtgggttgcgcgttggtcgtgaaaactca	
<i>M. gordonae</i>	ccggaattactgggcgtaaagagctcgtaggtgggttgcgcgttggtcgtgaaatctca	
<i>M. heckeshornense</i>	ccggaattactgggcgtaaagagctcgtaggtgggttgcgcgttggtcgtggaatgcca	
<i>M. intercellulare</i>	ccggaattactgggcgtaaagagctcgtaggtgggttgcgcgttggtcgtgaaatctca	
<i>M. kansaii</i>	ccggaattactgggcgtaaagagctcgtaggtgggttgcgcgttggtcgtgaaatctca	
<i>M. kubicae</i>	ccggaattactgggcgtaaagagctcgtaggtgggttgcgcgttggtcgtgaaaaccgg	
<i>M. lentoflavum</i>	ccggaattactgggcgtaaagagctcgtaggtgggttgcgcgttggtcgtgaaaaccgg	
<i>M. mucogenicum</i>	ccggaattactgggcgtaaagagctcgtaggtgggttgcgcgttggtcgtgaaaactca	
<i>M. parafinum</i>	ccggaattactgggcgtaaagagctcgtaggtgggttgcgcgttggtcgtgaaatctca	
<i>M. simiae</i>	cnggaattactgggcgtaaagagctcgtaggtgggttgcgcgttggtcgtgaaaaccgg	
<i>M. szulgai</i>	ccggaattactgggcgtaaagagctcgtaggtgggttgcgcgttggtcgtgaaatctca	
<i>M. tuberculosis</i>	ccggaattactgggcgtaaagagctcgtaggtgggttgcgcgttggtcgtgaaatctca	

Fig. 2K

M. abscessus	cagcttaactgtgggcgtgcgggcgatacgggcagactagagtactgcaggggagactgg
M. avium	cggcttaactgtgagcgtgcgggcgatacgggcagactagagtactgcaggggagactgg
M. bovis	cggcttaactgtgagcgtgcgggcgatacgggcagactagagtactgcaggggagactgg
M. chelonae	cagcttaactgtgggcgtgcgggcgatacgggcagactagagtactgcaggggagactgg
M. farcinogen	cagcttaactgtgggcgtgcgggcgatacgggcagactagagtactgcaggggagactgg
M. fortuitum	cagcttaactgtgggcgtgcgggcgatacgggcagactagagtactgcaggggagactgg
M. gordonae	cggcttaactgtgagcgtgcggncgatacgggcagacttgagtactgcaggggagactgg
M. heckeshornense	cagcttaactgtgggcgtgcgggcgatacgggcaggctggagtgtctgcaggggagactgg
M. intercellulare	cggcttaactgtgagcgtgcgggcgatacgggcagactagagtactgcaggggagactgg
M. kansaii	cggcttaactgtgagcgtgcgngcgatacgggcagactagagtactgcaggggagactgg
M. kubicae	gggcttaaccctcggcgtgcgggcgatacgggcagactggagtactgcaggggagactgg
M. lentoflavum	gggcttaaccctcggcgtgcgggcgatacgggcagactggagtactgcaggggagactgg
M. mucogenicum	cagcttaactgtgggcgtgcgggcgatacgggcagactagagtactgcaggggagactgg
M. parafinum	cggcttaactgtgagcgtgcgggcgatacgggcagactagagtactgcaggggagactgg
M. simiae	gggcttaaccctcggcgtgcgggcgatacgggcagactggagtactgcaggggagactgg
M. szulgai	cggcttaactgtgagcgtgcggncgatacgggcagactggagtactgcaggggagactgg
M. tuberculosis	cggcttaactgtgagcgtgcgggcgatacgggcagactagagtactgcaggggagactgg



Fig. 2L

M. abscessus	aattcctggtgtagcggtggaatgcgagatatcaggaggaacaccggtggcgaaggcgg	711
M. avium	aattcctggtgtagcggtggaatgcgagatatcaggaggaacaccggtggcgaaggcgg	
M. bovis	aattcctggtgtagcggtggaatgcgagatatcaggaggaacaccggtgncgaaggcgg	
M. chelonae	aattcctggtgtagcggtggaatgcgagatatcaggaggaacaccggtggcgaaggcgg	
M. farcinogen	aattcctggtgtagcggtggaatgcgagatatcaggaggaacaccggtggcgaaggcgg	
M. fortuitum	aattcctggtgtagcggtggaatgcgagatatcaggaggaacaccggtggcgaaggcgg	
M. gordonae	aattcctggtgtagcggtggaatgcgagatatcaggaggaacaccggtggcgaaggcgg	
M. heckeshornense	aattcctggtgtagcggtggaatgcgagatatcaggaggaacaccggtggcgaaggcgg	
M. intercellulare	aattcctggtgtagcggtggaatgcgagatatcaggaggaacaccggtggcgaaggcgg	
M. kansaii	aattcctggtgtagcggtggaatgcgagatatcaggaggaacaccggtggcgaaggcgg	
M. kubicae	aattcctggtgtagcggtggaatgcgagatatcaggaggaacaccggtggcgaaggcgg	
M. lentoflavum	aattcctggtgtagcggtggaatgcgagatatcaggaggaacaccggt-----	
M. mucogenicum	aattcctggtgtagcggtggaatgcgagatatcaggaggaacaccggtggcgaaggcgg	
M. parafinum	aattcctggtgtagcggtggaatgcgagatatcaggaggaacaccggtggcgaaggcgg	
M. simiae	aattcctggtgtagcggtggaatgcgagatatcaggaggaacaccggtggcgaaggcgg	
M. szulgai	aattcctggtgtagcngtggaatgcgagatatcaggaggaacaccggtggcgaaggcgg	
M. tuberculosis	aattcctggtgtagcggtggaatgcgagatatcaggaggaacaccggtggcgaaggcgg	

Fig. 2M

M. abscessus	gtctctgggcagtaactgacgctgaggagcgaaagcgtgggtagcgaacaggattagataccctg
M. avium	gtctctgggcagtaactgacgctgagg-----
M. bovis	gtctctgggcagtaactgacgctgaggagcgaaag-----
M. chelonae	gtctctgggcagtaactgacgctgaggagcgaaagcgtgg-----
M. farcinogen	gtctctgggcagtaactgacgctgaggagcgaaagcgtgggga-----
M. fortuitum	gtctctgggcagtaactgacgctgaggagcgaaagcgtggggagcgaacagg-----
M. gordonae	gtctctgggcagtaactgacgctgaggagcgaaagcgtg-----
M. heckeshornense	gtctctg-----
M. intercellulare	gtctctgggcagtaactgacgctgaggagcgaaagcgtggggagcgaa-----
M. kansaii	gtctctgggcagtaactgacgctgaggagcgaaagcgt-----
M. kubicae	gtctctgggcagtaactgacgctgaggagcgaaagcgtggggagcgaacaggatt-----
M. lentoflavum	-----
M. mucogenicum	gtctctgggcagtaactgacgctgaggagcgaaagcgtggg-----
M. parafinum	gtctctgggcagtaactgacgctgaggagcgaaagcgtggggagc-----
M. simiae	gtctctgggcagtaactgacgctgaggagcgaaagcgtggggagcgaac-----
M. szulgai	gtctctgggcagtaactgacgctgaggagcgaaagcgt-----
M. tuberculosis	gtctctgggcagtaactgacgctgaggagcgaaag-----

Fig. 1B

M. abscessus	aacgggaaaggcccttcgggggtactcgagtggcgaacgggtgagtaaacacgtgggtgatc	111
M. avium	aacggaaaggcccttcgggagtactcgagtggcgaacgggtgagtaaacacgtgggcaat	
M. bovis	aacggaaagggtctcttcgggagatactcgagtggcgaacgggtgagtaaacacgtgggtgat	
M. chelonae	aacgggaaaggcccttcgggggtactcgagtggcgaacgggtgagtaaacacgtgggtgatc	
M. farcinogen	aacggaaaggcccttcgggggtactcgagtggcgaacgggtgagtaaacacgtgggtgatct	
M. fortuitum	aacggaaaggcccttcgggtactcgagtggcgaacgggtgagtaaacacgtgggtgatctg	
M. gordonae	aacggtaaggcccttcgggntacacgagtggcgaacgggtgagtaaacacgtgggtaatct	
M. heckeshornense	aacggaaaggcccgcttcgggtgggtgctcgagtggcgaacgggtgagtaaacacgtgggtg	
M. intercellulare	aacggaaagncccttcgggggtactcgagtggcgaacgggtgagtaaacacgtgggcaatc	
M. kansaii	aacggaaagggtctcttcgggagacactcgagtggcgaacgggtgagtaaacacgtgggcaat	
M. kubicae	aacggaaaggcccttcgggggtactcgagtggcgaacgggtgagtaaacacgtgggtgat	
M. lentoflavum	aacggaaaggcccttcgggagtactcgagtggcgaacgggtgagtaaacacgtgggtaat	
M. mucogenicum	aacggaaaggcccttcgggggtactcgagtggcgaacgggtgagtaaacacgtgggtgatct	
M. parafinum	aacggaaaggcccttcgggggtactcgagtggcgaacgggtgagtaaacacgtngcaat	
M. simiae	aacggaaaggcccttcgggggtactcgagtggcgaacgggtgagtaaacacgtgggtaat	
M. szulgai	aacggaaagncccttcgggntactcgagtggcgaacgggtgagtaaacacgtgggtaatc	
M. tuberculosis	aacggaaagggtctcttcgggagatactcgagtggcgaacgggtgagtaaacacgtgggtgat	